

# *Field Report*

## Devils Tower National Monument

### ■ 1.0 Summary

Devils Tower National Monument (NM), located in the extreme northeast corner of Wyoming, appears to be a strong candidate for the introduction of alternative modes of transportation. Devils Tower was set aside as the first national monument by Theodore Roosevelt in 1906 under the Antiquities Act as “a natural wonder and object of great scientific interest...to reserve, preserve, and protect the lofty isolated road and surrounding reserved public lands as an object of historic and scientific interest for the public benefit.” It has high levels of summer visitation, a single, narrow route to and from the Visitor Center located near the base of the tower, and inadequate parking facilities at the Visitor Center. The need for alternative transportation is enhanced by the NPS’s reluctance to further impact resources within the Park by expanding roadway and parking facilities.

Several short-term traffic management measures have been implemented or have been proposed to reduce congestion and enhance safety, including:

- Improved pedestrian amenities.
- New pullout areas.
- Trailer parking areas where visitors are directed to drop off camper trailers before continuing to the Visitor Center. This area is also used for tour bus parking.
- Parking management at the Visitor Center.
- Scheduling the arrival time of tour buses to reduce peak-period congestion.

Alternative long-term solutions include:

- A visitor reservation system.
- Restricted access by oversized vehicles. This would require implementation of limited shuttle service between a remote parking area and the existing Visitor Center.
- Remote parking and transit system to/from the existing Visitor Center for all visitors to the Park.

- Construction of a replacement Visitor Center and transit system to/from the tower.
- Shuttle system between Devils Tower NM and the town of Hulett, Wyoming.

Several short-term traffic management measures have been implemented or have been proposed to reduce congestion and enhance safety, including:

- Improved pedestrian amenities including boardwalks and pedestrian markings.
- New pullout areas to reduce vehicle-vehicle conflict points.
- Trailer parking areas where visitors are directed to drop off camper trailers before continuing to the Visitor Center. This area is also used for tour bus parking.
- Parking management at the Visitor Center, particularly during Rally Week.
- Scheduling the arrival time of tour buses to reduce peak period congestion.

Projected growth in visitation to the Park will require long-term solutions as well. Alternative solutions are summarized in Section 5.2. Note that all of the long-term alternatives would only be required during peak summer months. During the remainder of the year, the existing access policy could be used.

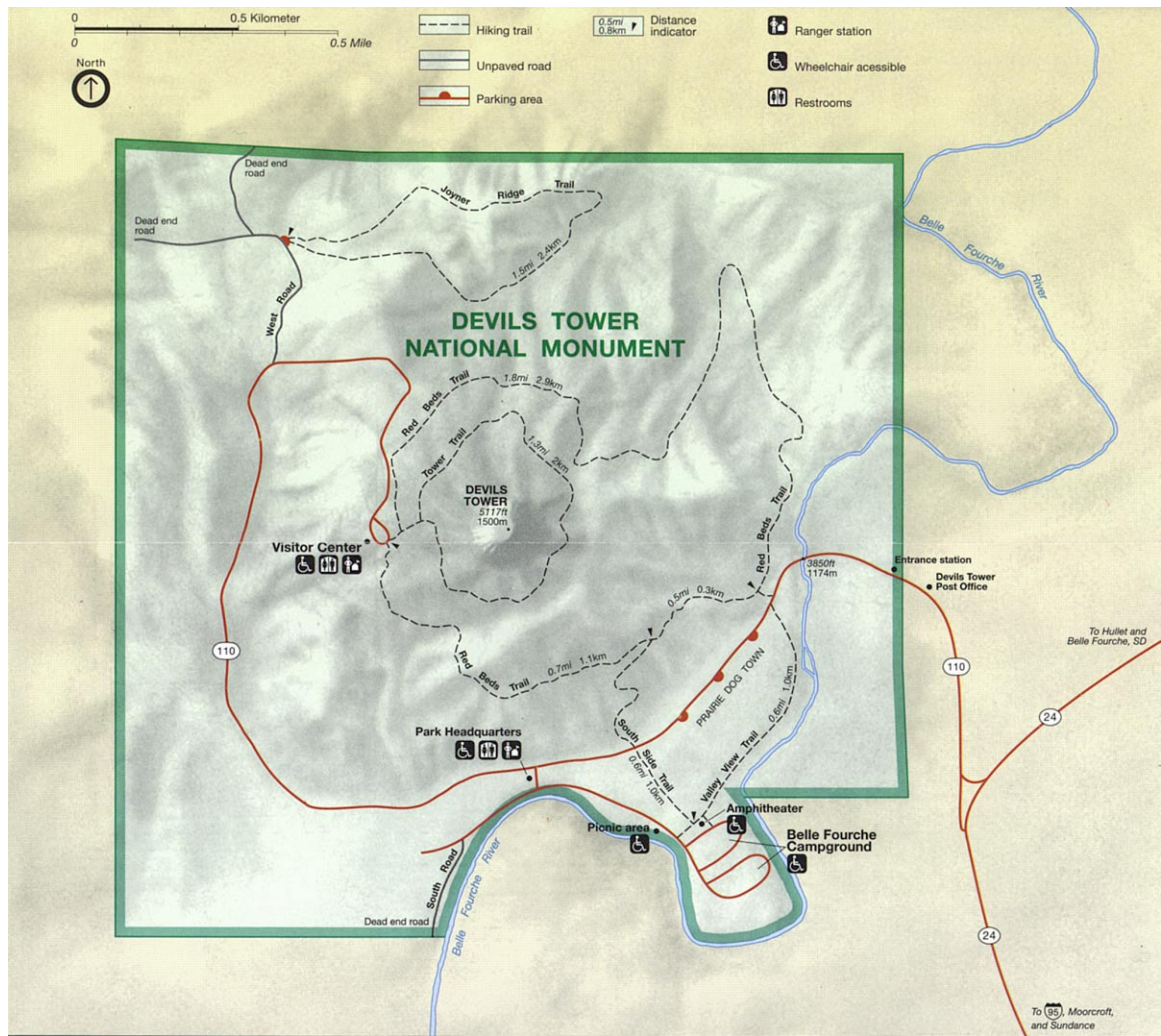
## ■ 2.0 Background Information

### 2.1 Location

Figure 1 shows the location of Devils Tower NM while Figure 2 shows the layout of features within the Park. Devils Tower NM is located in the extreme northeast corner of Wyoming, near the Black Hills National Forest. The closest town to the Park is Hulett, 10 miles to the north with a population of about 500. Other towns near the Park include Sundance, 28 miles to the southeast, and Moorcroft, 37 miles to the southwest. Access is provided via Wyoming State Route 110, which junctions with State Route 24 less than a mile outside the park entrance. State Route 110 is the only public road in and out of the Park and also serves as the main park road.

### 2.2 Administration and Classification

Devils Tower was set aside as the first national monument by Theodore Roosevelt in 1906 under the Antiquities Act as “a natural wonder and object of great scientific interest...to reserve, preserve, and protect the lofty isolated road and surrounding reserved public lands as an object of historic and scientific interest for the public benefit.” Additional lands were added to the monument in accordance with the Act of August 9, 1955. Devils Tower NM is managed by the NPS. The Park Superintendent is Chas Cartwright.

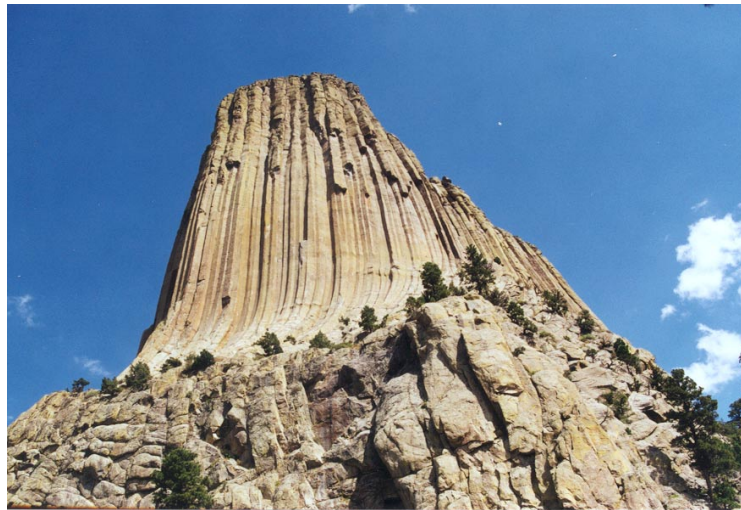
**Figure 1. Park Features**

## 2.3 Physical Description

Devils Tower NM consists of a rough square, approximately 1.5 miles on each side, containing 1,347 acres. This square is centered around Devils Tower, a nearly vertical monolith that rises 1,267 feet above the Belle Fourche River, which serves as the south boundary of the Park. The tower is the remnant of an ancient volcanic feature. At 867 feet high, it is the dominant landmark in the northern Great Plains and one of the premier rock climbing areas in North America.

The park entrance station is located on the eastern park boundary. Amenities within the Park include a Visitor Center, a prairie dog viewing area, a picnic area, a 50-site campground, an amphitheater, administrative and maintenance facilities, an employee residential area, and numerous hiking trails. Several small tourist-oriented developments are located just outside the park entrance offering camping, meals, souvenirs, and other services.

There are no private inholdings within the boundary of the monument. Land surrounding the monument consists of both private land and state land.



## **2.4 Mission and Goals of Devils Tower NM**

The mission and goals of Devils Tower NM are to:

- Restore and maintain the health and diversity of the monument's natural systems;
- Preserve the archeological, historic, and ethnographic values of Devils Tower;
- Interpret the significant and varied themes of Devils Tower; and
- Balance educational, spiritual, and recreational uses of Devils Tower and its surrounding landscape to provide meaningful visitor experiences.

## **2.5 Visitation Levels and Visitor Profile**

Devils Tower NM accommodated approximately 403,000 visitors in 1998 with 72 percent arriving during June, July and August. The peak visitation year-to-date occurred in 1992, when 461,000 park visitors were recorded. Although overall visitation has been relatively stable over the last 10 years, recent visitation figures are more than double those from 20 years ago. Most visitors are from the upper Midwest and Great Lakes region of the United States. Six percent of visitors are international visitors. The majority of visitors arrive in family groups, stay less than one day, and are visiting the Devils Tower NM as part of a longer trip. The most often cited reasons for visiting Devils Tower NM are to view geologic features and to visit the nation's first national monument.

The first week in August is traditionally the busiest week of the year at Devils Tower NM. This peak level of activity coincides with the motorcycle rally held annually in Sturgis,

South Dakota. The peak day of Rally Week typically occurs on Wednesday when the town of Hulett hosts the annual Ham'n'Jam festival. A total of 2,803 vehicles were recorded entering the Park on August 6, 1997 compared to the peak day in July of 1997 when 1,227 entering vehicles were recorded.

The number of vehicles entering the Park increases rapidly in the morning hours, beginning at 7:00 a.m. and reaching a peak between 11:00 a.m. and 12:00 p.m., before gradually tapering off during the afternoon and evening hours. The number of exiting vehicles follows a similar pattern, with a peak occurring later in the day, between 1:00 p.m. and 2:00 p.m. Typically, 86 percent of entering vehicles are passenger cars, trucks or vans while 11 percent are recreational vehicles (RVs). During Rally Week, 80 percent of entering vehicles are motorcycles.

## ■ 3.0 Existing Conditions, Issues and Concerns

### 3.1 Transportation Conditions, Issues and Concerns



The following transportation-related problems were identified in a March 1999 transportation study of Devils Tower NM:

- A queue of vehicles waiting to enter the Park frequently extends outside the park boundary during peak visitation periods, blocking the private driveways located just outside the park entrance.
- Trailer parking areas do not have stabilized surfacing and are subject to closure during wet weather.
- The Visitor Center is located at the end of a narrow, three-mile entrance road. This road lacks adequate shoulders in some locations and does not provide for pedestrians or bicycles.



- Most visitor day-use parking areas in the Park are currently being utilized at or near capacity during the peak hour of a typical summer visitation day. Parking for passenger cars, RVs and tour buses at the Visitor Center is grossly inadequate.
- A high level of pedestrian and vehicle activity in the vicinity of the Visitor Center results in severe congestion and high potential for pedestrian/vehicle conflicts.

In general, these problems reflect a transportation system that would benefit from the implementation of an alternative transportation system (ATS).

### **3.2 Community Development Conditions, Issues and Concerns**

The town of Hulett (population 500), located approximately 10 miles to the north, serves as a gateway community to the Park. Representatives of Hulett have expressed an interest in participating in a transportation system that would include the community (e.g., shuttle between Hulett and Devils Tower NM). Other towns near the Park include Sundance (population 1,700), 28 miles to the southeast, and Moorcroft (population 1,000), 37 miles to the southwest. The distance to these communities constrains their ability to serve as gateway communities.

Members of the NPS staff view the relationship between Devils Tower NM and the surrounding communities as “poor” to “fair.” The strained nature of the relationship reflects an overall distrust of the federal government by the local general public that is based, in part, on the perceived threat of the environmental/resource management movement to logging, ranching and mining interests. This has the potential to influence community opinion regarding potential park boundary adjustments that may result from the relocation of the Visitor Center and/or implementation of a transit system.

Other community issues include:

- Open-pit mining in northeast Wyoming has the potential to affect the air quality at Devils Tower;
- The surrounding area hosts large numbers of hunters each fall, requiring additional patrolling of the Park during hunting season; and
- Trespassing by livestock from surrounding ranches.

In general, negative impacts to the surrounding communities would not be expected as a result of the implementation of an ATS at Devils Tower NM.

### **3.3 Natural or Cultural Resource Conditions, Issues and Concerns**

Some of the key issues related to natural or cultural resources at Devils Tower include:

- Climbing on the tower has an adverse effect on plants, animals, soil, the rock itself, American Indian cultural uses (see Section 3.5) and the experience of the tower’s natural setting by other visitors;
- Human noise resulting from automobiles, motorcycles, airplanes and generators is disturbing the quiet solitude of Devils Tower;
- Exotic plants are currently altering the native plant communities within the Park;
- The current population of deer in the Park is believed to be having a detrimental impact on some of the vegetation; and
- The NPS has been the target of criticism from the logging industry regarding the prescribed burns that are being used within the Park to remove fuel build-up on the forest floor, thus preventing potential disaster in case of accidental fire.

Implementation of an ATS would have a potentially positive impact on park resources by reducing noise levels and improving air quality in the vicinity of the tower. Conversely, construction of infrastructure associated with an ATS could result in negative impacts to park resources.

### **3.4 Recreation Conditions, Issues and Concerns**

The most common visitor activities at Devils Tower NM include viewing scenery, taking photographs and visiting the Visitors Center which is open mid-spring through fall. Other activities offered at Devils Tower NM include camping, rock climbing, interpretive programs and hiking. There are seven miles of hiking trails at Devils Tower NM, including the popular 1.3-mile paved Tower Trail which circles the tower itself. Although technical rock climbing of the tower is allowed, many American Indian tribes would prefer that all climbing be banned from the tower (see Section 3.5).

Since most recreational activities occur in the immediate vicinity of the tower, implementation of an ATS would be expected to enhance the visitor experience by reducing congestion, improving safety, and emphasizing the serenity of the area surrounding the tower.

### **3.5 Tribal Considerations**

Northern Plains Indians have long considered Devils Tower a sacred site, a place for prayers and offerings, vision quests, sweat lodges, and ceremonies. Tribes in the region include the Eastern Shoshone, Crow, Kiowa, Arapaho, Cheyenne and Lakota. American Indians object to the name Devils Tower, considering it offensive to a site they regard as sacred. They have formally expressed their desire to restore the name “Bear Lodge,” one

of many historical names used by American Indians, to the tower. Local citizens are equally emphatic that the site remain as Devils Tower, indicating that the name is well-known and thus encourages the tourism so vital to Wyoming's economy. Although a compromise has not been reached, it has been suggested that the name of the tower itself be changed to Bear Lodge while the name of the monument would remain Devils Tower. American Indian and local citizen groups have not yet agreed to this.

Many American Indian tribes would also prefer that all climbing be banned from the tower, while climbers themselves would like access to climb year-round. The Climbing Management Plan, implemented by the NPS in 1995, promotes compromise between the two groups. The plan allows for management of Devils Tower as a cultural resource as well as a natural and recreational resource. Out of respect for American Indian beliefs, climbers are asked to voluntarily refrain from climbing during the month of June.

## ■ 4.0 Planning and Coordination

### 4.1 Unit Plans

The last General Management Plan (GMP) for Devils Tower NM was completed in 1985. The NPS is in the early stages of a two-year process to prepare a new GMP. The current task includes reaffirming the purpose of Devils Tower NM, gathering and analyzing information, identifying the monument's significant resources, and determining issues and concerns. The plan is scheduled for completion in the year 2001.

A 1993 study performed by the NPS staff provided a basis for a comparative evaluation of sites on which to construct a new Visitor Center to replace the existing Visitor Center which lacks adequate ventilation and is too small to accommodate existing and projected visitation levels. The study process evaluated six potential sites to determine one that would best provide for the needs of visitors while protecting monument resources. The preferred site for a new Visitor Center from the 1993 study is located just within the park boundary near the main entrance. The distance from the preferred site to the base of the tower is approximately 2.9 miles. Under this proposal, a shuttle, scheduled every 10 minutes, would be used to transport visitors from the Visitor Center to the tower parking area. During the peak season, visitors in cars and recreation vehicles would be required to use the shuttle. During the off-season, visitors would continue to use the tower parking area. Bus tours would be permitted to go directly to the tower after a short stop at the Visitor Center.

The 1999 Transportation Study recommended that the park develop a remote parking area at one of two alternative sites: one located just within the park boundary near the entrance (the preferred site of a new Visitor Center in the 1993 study) and the other located just outside the park entrance. The study assumed continued use of the existing Visitor Center. The study further recommended that the Park issue a contract (government or concession) to provide, operate, and maintain a fleet of standard school buses on a fixed route between this parking area and the Visitor Center during the summer season. During the remainder of the year, the study recommended that the current access policy be maintained.



The NPS continues to evaluate the advantages and disadvantages of the recommendations of these and other studies as part of the current GMP update. Consideration is still being given to implementation of an ATS either with or without a new Visitor Center. In addition to those sites previously identified, consideration will also be given to sites located a considerable distance from the park boundary.

## 4.2 Public and Agency Coordination

As part of the GMP process, the NPS staff will be seeking participation and input from the general public, both locally and nationally, the state of Wyoming, and other federal agencies and special interest groups. American Indian tribes have been and will continue to be consulted regarding various issues affecting the monument, especially those that may adversely impact ethnographic or archeological sites.

## ■ 5.0 Assessment of Need and System Options

### 5.1 Magnitude of Need



The need for alternative transportation at Devils Tower NM appears to be quite strong based on the following factors:

- The Park has high levels of summer visitation and significant peaks during Rally Week.
- The Park has a single, narrow access route to and from the Visitor Center located near the base of the tower. The road has inadequate shoulders in some locations and does not provide for pedestrians and bicycles.
- There are inadequate parking facilities at the Visitor Center.

- High visitation and the physical layout of the roadway and parking facilities at the Visitor Center result in severe congestion and safety concerns.
- The NPS is reluctant to further impact resources within the Park by expanding roadway and parking facilities.

## 5.2 Range of Considered Transit Alternatives

Several short-term traffic management measures have been implemented or have been proposed to reduce congestion and enhance safety, including:

- Improved pedestrian amenities including boardwalks and pedestrian markings.
- New pullout areas to reduce vehicle-vehicle conflict points.
- Trailer parking areas where visitors are directed to drop off camper trailers before continuing to the Visitor Center. This area is also used for tour bus parking.
- Parking management at the Visitor Center, particularly during Rally Week.
- Scheduling the arrival time of tour buses to reduce peak period congestion.

Projected growth in visitation to the Park will require long-term solutions as well. Alternative solutions are summarized below. Note that all of the long-term alternatives would only be required during peak summer months. During the remainder of the year, the existing access policy could be used.

1. **Visitor Reservation System** – This system would meter the number of vehicles entering the Park. There are two possible system types: an advanced reservation system that would require all visitors to contact the Park ahead of time to obtain an access permit and an on-demand reservation system where the Park would issue tickets allowing visitors to enter the Park only at specific times. This alternative is not desirable because of the logistics necessary in handling the reservations, the administrative costs, and the impact on visitors, which has the potential to decrease visitation by eliminating visitor spontaneity. In addition, local merchants would likely resist a management technique that might limit the number of visitors to the area.
2. **Restricted Access of Oversized Vehicles** – Vehicles over a specific length (typically 22 feet at other National Parks) would be required to park in a remote lot. This would require implementation of limited shuttle service between the remote parking area and the existing Visitor Center. An assessment of existing and projected visitation levels indicates a need for shuttle buses to accommodate 60 one-way person-trips per hour now and up to 113 one-way person-trips in the year 2020. Tour buses would be excluded from the restriction to reduce the need for the shuttle buses to accommodate large groups.
3. **Remote Parking Lot and Transit System To/From the Existing Visitor Center** – Day visitors to the Park would park their vehicles in a remote parking lot and ride a transit

system to the existing Visitor Center and other visitor destinations within the Park. Administrative vehicles, overnight guests at the campground, and tour buses would be allowed to enter the Park. The campground guests would be required to ride the transit system if they desired to travel to other locations within the Park. The transit operation would consist of a small fleet of transit vehicles that would operate on a fixed-shuttle route. The shuttle route would include stops at Prairie Dog Town, the picnic/campground area and the Visitor Center. Two alternative sites were documented in the 1999 Transportation Study: one located just within the park boundary near the entrance and the other located just outside the park entrance. If the remote parking were located within the park boundary, the existing entrance system could be used. If the remote parking area were located outside the park boundary, an additional fee collection kiosk would be needed at the remote parking lot. The fee for the shuttle service would be included in the park entrance fee. During the peak season, visitors in cars and recreational vehicles would be required to use the shuttle. During the off-season, visitors would continue to use the existing Visitor Center parking area.

4. **Construction of a Replacement Visitor Center/Remote Parking Lot and Transit System To/From the Tower** – Similar to Alternative 3 except that the remote parking lot would be constructed in conjunction with the construction of a new Visitor Center. A 1993 study evaluated six potential sites to determine one that would best provide for the needs of visitors while protecting monument resources. The study identified the preferred site to be just within the park boundary near the main entrance. The distance from the preferred site to the base of the tower is approximately 2.9 miles. Under the proposal, a shuttle, scheduled every 10 minutes, would be used to transport visitors from the Visitor Center to the tower parking area. During the peak season, visitors in cars and recreation vehicles would be required to use the shuttle. During the off-season, visitors would continue to use the tower parking area. Bus tours would all be permitted to go directly to the tower after a short stop at the Visitor Center. During the field visit, the Park Superintendent noted that no one site is favored at this time. Consideration will be given to sites located a considerable distance from the park entrance that offer advantages with respect to viewing angles and access.
5. **Shuttle System between Devils Tower NM and the Town of Hulett** – Representatives of Hulett have expressed an interest in participating in a transportation system that would include the community. A transit connection between Hulett and Devils Tower would be privately owned and operated. The exact route of the connection would depend on the transit system within the Park. For example, without a transit system within the Park, the shuttle from Hulett would likely enter the Park and travel to the Visitor Center. If a transit system is implemented within the Park, the shuttle from Hulett would likely terminate at the remote parking area to allow passengers to transfer to the Park's transit system.

## ■ 6.0 Bibliography

Transportation Study, Devils Tower National Monument, United States Department of Interior, National Park Service, Prepared by Robert Peccia & Associates, 1999.

Environmental Assessment/General Management Plan/Development Concept Plan, Devils Tower National Monument, United States Department of Interior, National Park Service, 1985.

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Resource Management Plan, Devils Tower National Monument, United States Department of Interior, National Park Service, 1998.

General Management Plan Newsletter, Issue 1, Devils Tower National Monument, United States Department of Interior, National Park Service, 1999.

## ■ 7.0 Persons Interviewed

Chas Cartwright, Superintendent